Gang Chen

List of Publications by Citations

575 papers	61,530 citations	122 h-index	237 g-index
630 ext. papers	69,553 ext. citations	8.4 avg, IF	8.11 L-index

#	Paper	IF	Citations
575	High-thermoelectric performance of nanostructured bismuth antimony telluride bulk alloys. *Science*, **2008**, 320, 634-8	33.3	4220
574	New Directions for Low-Dimensional Thermoelectric Materials. *Advanced Materials*, **2007**, 19, 1043-1053	24	2967
573	Bulk nanostructured thermoelectric materials: current research and future prospects. *Energy and Environmental Science*, **2009**, 2, 466	35.4	1448
572	Solar steam generation by heat localization. *Nature Communications*, **2014**, 5, 4449	17.4	1120
571	Nanoscale thermal transport. II. 2003–2012. *Applied Physics Reviews*, **2014**, 1, 011305	17.3	1050
570	Analysis of optical absorption in silicon nanowire arrays for photovoltaic applications. *Nano Letters*, **2007**, 7, 3249-52	11.5	975
569	Perspectives on thermoelectrics: from fundamentals to device applications. *Energy and Environmental Science*, **2012**, 5, 5147-5162	35.4	925
568	Enhanced thermoelectric figure-of-merit in nanostructured p-type silicon germanium bulk alloys. *Nano Letters*, **2008**, 8, 4670-4	11.5	861
567	Thermal conductivity and ballistic-phonon transport in the cross-plane direction of superlattices. *Physical Review B*, **1998**, 57, 14958-14973	3.3	836
566	High-performance flat-panel solar thermoelectric generators with high thermal concentration. *Nature Materials*, **2011**, 10, 532-8	27	790
565	Recent developments in thermoelectric materials. *International Materials Reviews*, **2003**, 48, 45-66	16.1	785
564	A benchmark study on the thermal conductivity of nanofluids. *Journal of Applied Physics*, **2009**, 106, 094312	2.5	766
563	Solar-driven interfacial evaporation. *Nature Energy*, **2018**, 3, 1031-1041	62.3	715
562	Enhancement of Thermoelectric Figure-of-Merit by a Bulk Nanostructuring Approach. *Advanced Functional Materials*, **2010**, 20, 357-376	15.6	706
561	Steam generation under one sun enabled by a floating structure with thermal concentration. *Nature Energy*, **2016**, 1,	62.3	650
560	Polyethylene nanofibres with very high thermal conductivities. *Nature Nanotechnology*, **2010**, 5, 251-5	28.7	581
559	Surface phonon polaritons mediated energy transfer between nanoscale gaps. *Nano Letters*, **2009**, 9, 2909-13	11.5	579

558	Enhanced thermoelectric figure of merit in nanostructured n-type silicon germanium bulk alloy. *Applied Physics Letters*, **2008**, 93, 193121	3.4	560
557	Heat transport in silicon from first-principles calculations. *Physical Review B*, **2011**, 84,	3.3	542
556	Recent advances in thermoelectric nanocomposites. *Nano Energy*, **2012**, 1, 42-56	17.1	536
555	Experimental studies on anisotropic thermoelectric properties and structures of n-type Bi2Te2.7Se0.3. *Nano Letters*, **2010**, 10, 3373-8	11.5	524
554	High thermoelectric performance by resonant dopant indium in nanostructured SnTe. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 13261-6	11.5	503
553	Enhanced thermoelectric figure-of-merit in p-type nanostructured bismuth antimony tellurium alloys made from elemental chunks. *Nano Letters*, **2008**, 8, 2580-4	11.5	476
552	Size effects on the hydrogen storage properties of nanostructured metal hydrides: A review. *International Journal of Energy Research*, **2007**, 31, 637-663	4.5	474
551	Thermoelectric Property Studies on Cu-Doped n-type CuxBi2Te2.7Se0.3 Nanocomposites. *Advanced Energy Materials*, **2011**, 1, 577-587	21.8	447
550	Pulse accumulation, radial heat conduction, and anisotropic thermal conductivity in pump-probe transient thermoreflectance. *Review of Scientific Instruments*, **2008**, 79, 114902	1.7	422
549	Nanostructured Bulk Silicon as an Effective Thermoelectric Material. *Advanced Functional Materials*, **2009**, 19, 2445-2452	15.6	419
548	A salt-rejecting floating solar still for low-cost desalination. *Energy and Environmental Science*, **2018**, 11, 1510-1519	35.4	409
547	Coherent phonon heat conduction in superlattices. *Science*, **2012**, 338, 936-9	33.3	403
546	Enhancement of thermoelectric properties by modulation-doping in silicon germanium alloy nanocomposites. *Nano Letters*, **2012**, 12, 2077-82	11.5	395
545	Ballistic-diffusive heat-conduction equations. *Physical Review Letters*, **2001**, 86, 2297-300	7.4	395
544	Power factor enhancement by modulation doping in bulk nanocomposites. *Nano Letters*, **2011**, 11, 2225-30	11.5	386
543	Resonant bonding leads to low lattice thermal conductivity. *Nature Communications*, **2014**, 5, 3525	17.4	374
542	Thermal conductivity spectroscopy technique to measure phonon mean free paths. *Physical Review Letters*, **2011**, 107, 095901	7.4	373
541	Phonon conduction in PbSe, PbTe, and PbTe1−xSex from first-principles calculations. *Physical Review B*, **2012**, 85,	3.3	368

540	Molecular dynamics simulation of thermal conductivity of silicon nanowires. *Applied Physics Letters*, **1999**, 75, 2056-2058	3.4	349
539	Response of the Zonal Mean Atmospheric Circulation to El Niño versus Global Warming. *Journal of Climate*, **2008**, 21, 5835-5851	4.4	344
538	Data reduction in 3ω method for thin-film thermal conductivity determination. *Review of Scientific Instruments*, **2001**, 72, 2139-2147	1.7	344
537	Enhanced thermoelectric figure of merit of p-type half-Heuslers. *Nano Letters*, **2011**, 11, 556-60	11.5	326
536	Optical absorption enhancement in silicon nanohole arrays for solar photovoltaics. *Nano Letters*, **2010**, 10, 1012-5	11.5	321
535	Theoretical phonon thermal conductivity of Si/Ge superlattice nanowires. *Journal of Applied Physics* , **2004**, 95, 682-693	2.5	312
534	Nanoscale design to enable the revolution in renewable energy. *Energy and Environmental Science*, **2009**, 2, 559	35.4	311
533	Enhanced thermal conductivity and viscosity of copper nanoparticles in ethylene glycol nanofluid. *Journal of Applied Physics*, **2008**, 103, 074301	2.5	311
532	Superplastic carbon nanotubes. *Nature*, **2006**, 439, 281	50.4	303
531	Size and Interface Effects on Thermal Conductivity of Superlattices and Periodic Thin-Film Structures. *Journal of Heat Transfer*, **1997**, 119, 220-229	1.8	302
530	Relationship between thermoelectric figure of merit and energy conversion efficiency. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 8205-10	11.5	300
529	A review of cermet-based spectrally selective solar absorbers. *Energy and Environmental Science*, **2014**, 7, 1615	35.4	300
528	Enhancement of thermoelectric figure-of-merit by resonant states of aluminium doping in lead selenide. *Energy and Environmental Science*, **2012**, 5, 5246-5251	35.4	299
527	Concentrating Solar Power. *Chemical Reviews*, **2015**, 115, 12797-838	68.1	298
526	Heavy doping and band engineering by potassium to improve the thermoelectric figure of merit in p-type PbTe, PbSe, and PbTe(1-y)Se(y). *Journal of the American Chemical Society*, **2012**, 134, 10031-8	16.4	297
525	Nonlocal and Nonequilibrium Heat Conduction in the Vicinity of Nanoparticles. *Journal of Heat Transfer*, **1996**, 118, 539-545	1.8	292
524	Direct measurement of room-temperature nondiffusive thermal transport over micron distances in a silicon membrane. *Physical Review Letters*, **2013**, 110, 025901	7.4	284
523	Molecular-dynamics simulation of thermal conductivity of silicon crystals. *Physical Review B*, **2000**, 61, 2651-2656	3.3	284

522	High thermal conductivity of single polyethylene chains using molecular dynamics simulations. *Physical Review Letters*, **2008**, 101, 235502	7.4	281
521	Surface modes for near field thermophotovoltaics. *Applied Physics Letters*, **2003**, 82, 3544-3546	3.4	280
520	Volumetric solar heating of nanofluids for direct vapor generation. *Nano Energy*, **2015**, 17, 290-301	17.1	276
519	Efficient light trapping in inverted nanopyramid thin crystalline silicon membranes for solar cell applications. *Nano Letters*, **2012**, 12, 2792-6	11.5	269
518	Spectral Phonon Transport Properties of Silicon Based on Molecular Dynamics Simulations and Lattice Dynamics. *Journal of Computational and Theoretical Nanoscience*, **2008**, 5, 141-152	0.3	267
517	Enhancement in Thermoelectric Figure-Of-Merit of an N-Type Half-Heusler Compound by the Nanocomposite Approach. *Advanced Energy Materials*, **2011**, 1, 643-647	21.8	256
516	Thermal conductivity modeling of periodic two-dimensional nanocomposites. *Physical Review B*, **2004**, 69,	3.3	251
515	Studies on Thermoelectric Properties of n-type Polycrystalline SnSe1-xSx by Iodine Doping. *Advanced Energy Materials*, **2015**, 5, 1500360	21.8	242
514	Plasmonic materials for energy: From physics to applications. *Materials Today*, **2013**, 16, 375-386	21.8	242
513	High thermoelectric cooling performance of n-type MgBi-based materials. *Science*, **2019**, 365, 495-498	33.3	240
512	An electrochemical system for efficiently harvesting low-grade heat energy. *Nature Communications*, **2014**, 5, 3942	17.4	236
511	Near-field thermal radiation between two closely spaced glass plates exceeding Planck□ blackbody radiation law. *Applied Physics Letters*, **2008**, 92, 133106	3.4	236
510	Modeling the Thermal Conductivity and Phonon Transport in Nanoparticle Composites Using Monte Carlo Simulation. *Journal of Heat Transfer*, **2008**, 130, 042410	1.8	229
509	Increased phonon scattering by nanograins and point defects in nanostructured silicon with a low concentration of germanium. *Physical Review Letters*, **2009**, 102, 196803	7.4	228
508	Tuning the carrier scattering mechanism to effectively improve the thermoelectric properties. *Energy and Environmental Science*, **2017**, 10, 799-807	35.4	227
507	Advances in thermoelectrics. *Advances in Physics*, **2018**, 67, 69-147	18.4	225
506	Spectral mapping of thermal conductivity through nanoscale ballistic transport. *Nature Nanotechnology*, **2015**, 10, 701-6	28.7	222
505	Thermoelectric properties of copper selenide with ordered selenium layer and disordered copper layer. *Nano Energy*, **2012**, 1, 472-478	17.1	217

504	Structure study of bulk nanograined thermoelectric bismuth antimony telluride. *Nano Letters*, **2009**, 9, 1419-22	11.5	216
503	Toward the Lambertian limit of light trapping in thin nanostructured silicon solar cells. *Nano Letters*, **2010**, 10, 4692-6	11.5	214
502	Thermal conductivity of symmetrically strained Si/Ge superlattices. *Superlattices and Microstructures*, **2000**, 28, 199-206	2.8	209
501	Stronger phonon scattering by larger differences in atomic mass and size in p-type half-Heuslers Hf1□TixCoSb0.8Sn0.2. *Energy and Environmental Science*, **2012**, 5, 7543	35.4	205
500	Aspects of Thin-Film Superlattice Thermoelectric Materials, Devices, and Applications. *MRS Bulletin*, **2006**, 31, 211-217	3.2	202
499	Studies on the Bi2Te3□Bi2Se3□Bi2S3 system for mid-temperature thermoelectric energy conversion. *Energy and Environmental Science*, **2013**, 6, 552-560	35.4	201
498	Modified effective medium formulation for the thermal conductivity of nanocomposites. *Applied Physics Letters*, **2007**, 91, 073105	3.4	199
497	Thermal conductivity of simple and tubular nanowire composites in the longitudinal direction. *Physical Review B*, **2005**, 72,	3.3	199
496	Experimental investigation of heat conduction mechanisms in nanofluids. Clue on clustering. *Nano Letters*, **2009**, 9, 4128-32	11.5	198
495	High thermoelectric performance of MgAgSb-based materials. *Nano Energy*, **2014**, 7, 97-103	17.1	197
494	Recent progress and future challenges on thermoelectric Zintl materials. *Materials Today Physics*, **2017**, 1, 74-95	8	195
493	Hydrodynamic phonon transport in suspended graphene. *Nature Communications*, **2015**, 6, 6290	17.4	191
492	Concentrating solar thermoelectric generators with a peak efficiency of 7.4%. *Nature Energy*, **2016**, 1,	62.3	190
491	Near-field radiative heat transfer between a sphere and a substrate. *Physical Review B*, **2008**, 78,	3.3	189
490	Heat Transfer in Nanostructures for Solid-State Energy Conversion. *Journal of Heat Transfer*, **2002**, 124, 242-252	1.8	188
489	Routes for high-performance thermoelectric materials. *Materials Today*, **2018**, 21, 974-988	21.8	187
488	Thermal conductivity of periodic microporous silicon films. *Applied Physics Letters*, **2004**, 84, 687-689	3.4	187
487	Unusual high thermal conductivity in boron arsenide bulk crystals. *Science*, **2018**, 361, 582-585	33.3	185

486	Atomic-scale imaging of wall-by-wall breakdown and concurrent transport measurements in multiwall carbon nanotubes. *Physical Review Letters*, **2005**, 94, 236802	7.4	184
485	Evidence for a spinon Fermi surface in a triangular-lattice quantum-spin-liquid candidate. *Nature*, **2016**, 540, 559-562	50.4	184
484	Manipulation of ionized impurity scattering for achieving high thermoelectric performance in n-type MgSb-based materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10548-10553	11.5	183
483	Enhancing phonon transmission across a Si/Ge interface by atomic roughness: First-principles study with the Green's function method. *Physical Review B*, **2012**, 86,	3.3	181
482	1ω2ω and 3ω methods for measurements of thermal properties. *Review of Scientific Instruments*, **2005**, 76, 124902	1.7	178
481	Nanoscale heat transfer--from computation to experiment. *Physical Chemistry Chemical Physics*, **2013**, 15, 3389-412	3.6	177
480	Ballistic-Diffusive Equations for Transient Heat Conduction From Nano to Macroscales. *Journal of Heat Transfer*, **2002**, 124, 320-328	1.8	177
479	Giant thermopower of ionic gelatin near room temperature. *Science*, **2020**, 368, 1091-1098	33.3	168
478	Thermal conductivity and heat transfer in superlattices. *Applied Physics Letters*, **1997**, 71, 2761-2763	3.4	166
477	Achieving high power factor and output power density in p-type half-Heuslers Nb1-xTixFeSb. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13576-13581	11.5	164
476	Thermal conductivity of half-Heusler compounds from first-principles calculations. *Physical Review B*, **2011**, 84,	3.3	163
475	Infrared-Transparent Visible-Opaque Fabrics for Wearable Personal Thermal Management. *ACS Photonics*, **2015**, 2, 769-778	6.3	162
474	Modeling study of thermoelectric SiGe nanocomposites. *Physical Review B*, **2009**, 80,	3.3	160
473	Significant reduction of lattice thermal conductivity by the electron-phonon interaction in silicon with high carrier concentrations: a first-principles study. *Physical Review Letters*, **2015**, 114, 115901	7.4	159
472	Effect of Hf Concentration on Thermoelectric Properties of Nanostructured N-Type Half-Heusler Materials HfxZr1−xNiSn0.99Sb0.01. *Advanced Energy Materials*, **2013**, 3, 1210-1214	21.8	158
471	Thermal Diffusivity Measurement of GaAs/AlGaAs Thin-Film Structures. *Journal of Heat Transfer*, **1994**, 116, 325-331	1.8	155
470	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. *Nature Communications*, **2019**, 10, 270	17.4	155
469	Thermal conductance and phonon transmissivity of metal–graphite interfaces. *Journal of Applied Physics*, **2010**, 107, 104907	2.5	154

468	Phase speed spectra and the recent poleward shift of Southern Hemisphere surface westerlies. *Geophysical Research Letters*, **2007**, 34,	4.9	154
467	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. *Nature Communications*, **2018**, 9, 2497	17.4	154
466	Frequency-dependent Monte Carlo simulations of phonon transport in two-dimensional porous silicon with aligned pores. *Journal of Applied Physics*, **2009**, 106, 114321	2.5	153
465	Charging-free electrochemical system for harvesting low-grade thermal energy. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17011-6	11.5	152
464	Effects of nanoscale porosity on thermoelectric properties of SiGe. *Journal of Applied Physics*, **2010**, 107, 094308	2.5	152
463	Thermal near-field radiative transfer between two spheres. *Physical Review B*, **2008**, 77,	3.3	152
462	Thermal conductivity modeling of core-shell and tubular nanowires. *Nano Letters*, **2005**, 5, 1111-5	11.5	152
461	Thermal radiation from photonic crystals: a direct calculation. *Physical Review Letters*, **2004**, 93, 213905	7.4	146
460	Thermal emission control with one-dimensional metallodielectric photonic crystals. *Physical Review B*, **2004**, 70,	3.3	146
459	Reversible temperature regulation of electrical and thermal conductivity using liquid-solid phase transitions. *Nature Communications*, **2011**, 2, 289	17.4	142
458	Partially coherent phonon heat conduction in superlattices. *Physical Review B*, **2003**, 67,	3.3	142
457	Ab initio study of electron-phonon interaction in phosphorene. *Physical Review B*, **2015**, 91,	3.3	137
456	Phonon heat conduction in nanostructures. *International Journal of Thermal Sciences*, **2000**, 39, 471-480	4.1	136
455	15.7% Efficient 10-μm-thick crystalline silicon solar cells using periodic nanostructures. *Advanced Materials*, **2015**, 27, 2182-8	24	128
454	Temperature dependence of thermophysical properties of GaAs/AlAs periodic structure. *Applied Physics Letters*, **1995**, 67, 3554-3556	3.4	125
453	Tailoring high-temperature radiation and the resurrection of the incandescent source. *Nature Nanotechnology*, **2016**, 11, 320-4	28.7	122
452	Nanostructured polymer films with metal-like thermal conductivity. *Nature Communications*, **2019**, 10, 1771	17.4	120
451	Enhanced Thermal Stability of W-Ni-Al2O3 Cermet-Based Spectrally Selective Solar Absorbers with Tungsten Infrared Reflectors. *Advanced Energy Materials*, **2015**, 5, 1401042	21.8	120

450	Simulation of Nanoscale Multidimensional Transient Heat Conduction Problems Using Ballistic-Diffusive Equations and Phonon Boltzmann Equation. *Journal of Heat Transfer*, **2005**, 127, 298-306	1.8	120
449	Thermoelectric Property Study of Nanostructured p-Type Half-Heuslers (Hf, Zr, Ti)CoSb0.8Sn0.2. *Advanced Energy Materials*, **2013**, 3, 1195-1200	21.8	119
448	On the importance of optical phonons to thermal conductivity in nanostructures. *Applied Physics Letters*, **2011**, 99, 053122	3.4	118
447	Measurements of anisotropic thermoelectric properties in superlattices. *Applied Physics Letters*, **2002**, 81, 3588-3590	3.4	118
446	Challenges in Microscale Conductive and Radiative Heat Transfer. *Journal of Heat Transfer*, **1994**, 116, 799-807	1.8	117
445	An optical pump-probe technique for measuring the thermal conductivity of liquids. *Review of Scientific Instruments*, **2008**, 79, 064902	1.7	116
444	Formation of crystallized titania nanotubes and their transformation into nanowires. *Nanotechnology*, **2005**, 16, 1935-1940	3.4	116
443	Supercooling of Peltier cooler using a current pulse. *Journal of Applied Physics*, **2002**, 92, 1564-1569	2.5	115
442	First-principles simulation of electron mean-free-path spectra and thermoelectric properties in silicon. *Europhysics Letters*, **2015**, 109, 57006	1.6	114
441	High thermoelectric conversion efficiency of MgAgSb-based material with hot-pressed contacts. *Energy and Environmental Science*, **2015**, 8, 1299-1308	35.4	114
440	Thermal interface conductance in Si/Ge superlattices by equilibrium molecular dynamics. *Physical Review B*, **2012**, 85,	3.3	113
439	A Special Issue on Nanoscale Heat Transfer. *Journal of Computational and Theoretical Nanoscience*, **2008**, 5, 1-2	0.3	113
438	A Microporous and Naturally Nanostructured Thermoelectric Metal-Organic Framework with Ultralow Thermal Conductivity. *Joule*, **2017**, 1, 168-177	27.8	112
437	Anomalous heat conduction in polyethylene chains: Theory and molecular dynamics simulations. *Physical Review B*, **2009**, 79,	3.3	112
436	Contactless steam generation and superheating under one sun illumination. *Nature Communications*, **2018**, 9, 5086	17.4	112
435	Photovoltaic-thermoelectric hybrid systems: A general optimization methodology. *Applied Physics Letters*, **2008**, 92, 243503	3.4	111
434	Deep defect level engineering: a strategy of optimizing the carrier concentration for high thermoelectric performance. *Energy and Environmental Science*, **2018**, 11, 933-940	35.4	110
433	Membrane-free battery for harvesting low-grade thermal energy. *Nano Letters*, **2014**, 14, 6578-83	11.5	110

432	Modeling and optimization of solar thermoelectric generators for terrestrial applications. *Solar Energy*, **2012**, 86, 1338-1350	6.8	108
431	Minimum thermal conductivity in superlattices: A first-principles formalism. *Physical Review B*, **2013**, 87,	3.3	108
430	Phase Speed Spectra and the Latitude of Surface Westerlies: Interannual Variability and Global Warming Trend. *Journal of Climate*, **2008**, 21, 5942-5959	4.4	108
429	Molecular engineered conjugated polymer with high thermal conductivity. *Science Advances*, **2018**, 4, eaar3031	14.3	103
428	Heat conduction mechanisms in nanofluids and suspensions. *Nano Today*, **2012**, 7, 124-136	17.9	101
427	Heat Transfer in Thermoelectric Materials and Devices. *Journal of Heat Transfer*, **2013**, 135,	1.8	101
426	Microscopic mechanism of low thermal conductivity in lead telluride. *Physical Review B*, **2012**, 85,	3.3	101
425	Thermal percolation in stable graphite suspensions. *Nano Letters*, **2012**, 12, 188-92	11.5	101
424	Real-time observation of tubule formation from amorphous carbon nanowires under high-bias Joule heating. *Nano Letters*, **2006**, 6, 1699-705	11.5	101
423	Thin-film 'Thermal Well' Emitters and Absorbers for High-Efficiency Thermophotovoltaics. *Scientific Reports*, **2015**, 5, 10661	4.9	98
422	Particularities of Heat Conduction in Nanostructures. *Journal of Nanoparticle Research*, **2000**, 2, 199-204	2.3	98
421	Impact of nanostructuring on the enthalpy of formation of metal hydrides. *International Journal of Hydrogen Energy*, **2008**, 33, 4122-4131	6.7	97
420	Thermoelectric cooling materials. *Nature Materials*, **2021**, 20, 454-461	27	97
419	Computation of thermal conductivity of Si/Ge superlattices by molecular dynamics techniques. *Microelectronics Journal*, **2000**, 31, 815-819	1.8	96
418	A Janus evaporator with low tortuosity for long-term solar desalination. *Journal of Materials Chemistry A*, **2019**, 7, 15333-15340	13	95
417	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. *Physical Review B*, **2017**, 95,	3.3	94
416	Theoretical efficiency of solar thermoelectric energy generators. *Journal of Applied Physics*, **2011**, 109, 104908	2.5	94
415	Transient cooling of thermoelectric coolers and its applications for microdevices. *Energy Conversion and Management*, **2005**, 46, 1407-1421	10.6	94

414	Simultaneous measurements of Seebeck coefficient and thermal conductivity across superlattice. *Applied Physics Letters*, **2002**, 80, 1758-1760	3.4	93
413	Reconstructing phonon mean-free-path contributions to thermal conductivity using nanoscale membranes. *Physical Review B*, **2015**, 91,	3.3	92
412	Quasiballistic heat transfer studied using the frequency-dependent Boltzmann transport equation. *Physical Review B*, **2011**, 84,	3.3	92
411	Solubility study of Yb in n-type skutterudites YbxCo4Sb12 and their enhanced thermoelectric properties. *Physical Review B*, **2009**, 80,	3.3	92
410	Thermal conductivities of quantum well structures. *Journal of Thermophysics and Heat Transfer*, **1993**, 7, 311-318	1.3	91
409	Understanding of the contact of nanostructured thermoelectric n-type Bi2Te2.7Se0.3 legs for power generation applications. *Journal of Materials Chemistry A*, **2013**, 1, 13093	13	90
408	Measuring Phonon Mean Free Path Distributions by Probing Quasiballistic Phonon Transport in Grating Nanostructures. *Scientific Reports*, **2015**, 5, 17131	4.9	90
407	Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. *Science*, **2020**, 367, 555-559	33.3	90
406	Study of the thermoelectric properties of lead selenide doped with boron, gallium, indium, or thallium. *Journal of the American Chemical Society*, **2012**, 134, 17731-8	16.4	89
405	Nanoscale thermal radiation between two gold surfaces. *Applied Physics Letters*, **2012**, 100, 233114	3.4	89
404	1D-to-3D transition of phonon heat conduction in polyethylene using molecular dynamics simulations. *Physical Review B*, **2010**, 82,	3.3	88
403	Observation of second sound in graphite at temperatures above 100 K. *Science*, **2019**, 364, 375-379	33.3	87
402	Goos-H□chen shifts at the interfaces between left- and right-handed media. *Optics Letters*, **2004**, 29, 872-4	3	87
401	Enhancement of thermoelectric figure-of-merit at low temperatures by titanium substitution for hafnium in n-type half-Heuslers Hf0.75□TixZr0.25NiSn0.99Sb0.01. *Nano Energy*, **2013**, 2, 82-87	17.1	86
400	Phonon Heat Conduction in Thin Films: Impacts of Thermal Boundary Resistance and Internal Heat Generation. *Journal of Heat Transfer*, **2001**, 123, 340-347	1.8	86
399	Gallium arsenide thermal conductivity and optical phonon relaxation times from first-principles calculations. *Europhysics Letters*, **2013**, 101, 16001	1.6	82
398	Semiclassical model for thermoelectric transport in nanocomposites. *Physical Review B*, **2010**, 82,	3.3	82
397	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. *MRS Bulletin*, **2018**, 43, 181-186	3.2	80

396	Diffusion of nickel and tin in p-type (Bi,Sb)2Te3 and n-type Bi2(Te,Se)3 thermoelectric materials. *Applied Physics Letters*, **2008**, 92, 101910	3.4	80
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394	Losses in plasmonics: from mitigating energy dissipation to embracing loss-enabled functionalities. *Advances in Optics and Photonics*, **2017**, 9, 775	16.7	79
393	A high-performance spectrally-selective solar absorber based on a yttria-stabilized zirconia cermet with high-temperature stability. *Energy and Environmental Science*, **2015**, 8, 3040-3048	35.4	78
392	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. *Nature Communications*, **2018**, 9, 1721	17.4	77
391	Phonon Wave Heat Conduction in Thin Films and Superlattices. *Journal of Heat Transfer*, **1999**, 121, 945-953	1.8	77
390	Enhancement of Thermoelectric Performance of n-Type PbSe by Cr Doping with Optimized Carrier Concentration. *Advanced Energy Materials*, **2015**, 5, 1401977	21.8	76
389	Sensitivity of the Latitude of the Surface Westerlies to Surface Friction. *Journals of the Atmospheric Sciences*, **2007**, 64, 2899-2915	2.1	76
388	Transition from near-field thermal radiation to phonon heat conduction at sub-nanometre gaps. *Nature Communications*, **2015**, 6, 6755	17.4	74
387	Fast phase formation of double-filled p-type skutterudites by ball-milling and hot-pressing. *Physical Chemistry Chemical Physics*, **2013**, 15, 6809-16	3.6	74
386	A Review of Heat Transfer Physics. *Nanoscale and Microscale Thermophysical Engineering*, **2008**, 12, 1-60	3.7	74
385	Application of SAXS to the study of particle-size-dependent thermal conductivity in silica nanofluids. *Journal of Nanoparticle Research*, **2008**, 10, 1109-1114	2.3	74
384	Thermoelectric property studies on bulk TiOx with x from 1 to 2. *Applied Physics Letters*, **2007**, 91, 052505	3.4	74
383	Skutterudite Unicouple Characterization for Energy Harvesting Applications. *Advanced Energy Materials*, **2013**, 3, 245-251	21.8	73
382	THE DISPARATE THERMAL CONDUCTIVITY OF CARBON NANOTUBES AND DIAMOND NANOWIRES STUDIED BY ATOMISTIC SIMULATION. *Microscale Thermophysical Engineering*, **2004**, 8, 61-69		73
381	Thermal conductivity of nanoporous bismuth thin films. *Applied Physics Letters*, **2004**, 84, 1883-1885	3.4	72
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